

Serial No. 09/718,754
Group Art Unit: 1638

REMARKS / ARGUMENTS

Reconsideration of the present application is respectfully requested. Claims 1, 2, 6, 21, 40, 41, 44, and 45 remain in this application.

Rejections under 35 U.S.C. §112

Rejections under 35 USC §112, second paragraph

Indefiniteness

Claims 1, 2, 21, 40-41, and 44-45 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Office Action states: "In claims 1, 21, 44, and 45, the metes and bounds of 'fragments' has not been defined. It has not been specified what is the function of the fragment, nor has Applicant described all the possible fragments which are being claimed."

The term "fragments" is extensively defined and described in the specification beginning on page 9, line 31 which reads: "Sequence *fragments* with high percent identity to the sequences of the present invention also refer to those fragments of a particular regulatory element nucleotide sequence disclosed herein *that operate to promote the seed-preferred expression of an operably linked isolated nucleotide sequence*". And again on page 10, beginning on line 15: "Such sequences encompass fragments capable of driving seed-preferred expression, fragments useful as probes to identify similar sequences, as well as elements responsible for temporal or tissue specificity." It is believed one of skill in the art, upon reading the specification, would be well apprised of the metes and bounds of claims 1, 21, 44, and 45.

It is respectfully submitted that the specification is not required to disclose all possible permutations defined by the limitations of claims 1, 21, 44, and 45. The specification *is* required to provide sufficient disclosure and enablement so that one

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skilled in the art could make the embodiments encompassed by the claims. Accordingly, this rejection should be withdrawn.

The Office Action states: "Claims 1, 2, 21, and 40 are indefinite in the recitation 'maize Jip1'. The promoter maize Jip1 has not been specifically defined. Amending the claims to recite 'maize Jip1 of SEQ ID NO:1' will obviate the rejection."

The rejection is respectfully traversed. The full phrase of the rejected claims reads: "...drives expression of DNA *coding for* maize Jip1..." referring to the maize Jip1 coding region, not the promoter. Therefore the Examiner's suggested change would not clarify the claim, but rather would render it indefinite.

The Office Action further asserts: "...that Applicants have not defined the metes and bounds of a 'maize Jip1 protein' and that the name 'maize Jip1 protein' is an arbitrary name.

The rejection is respectfully traversed. The specification on page 4, lines 26 and 27 recite: "The promoter was isolated from a coding sequence found in maize tissue libraries of 11 to 30 DAP (days after pollination) endosperm and 13 to 40 DAP embryo. *The coding region has 40% homology to a barley jasmonate -induced protein.* The promoter can be isolated with the primers of SEQ ID NOS: 2 and 3". (italics added)

Thus the term "DNA coding for maize Jip1..." is hardly arbitrary. The application teaches partial sequence of the coding region by species, name and partial sequence through the disclosure of primer sequences. Accordingly, this rejection should be withdrawn.

Rejections under 35 USC §112, first paragraph

Written Description

Claims 1, 2, 6, 21, 40 and 44-45 are rejected under 35 USC §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the

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inventor(s), at the time the application was filed, had possession of the claimed invention.

The Office Action contends: "...that Applicants have not specifically disclosed the functional cis-acting elements that are required for seed-preferred expression "

The rejection is respectfully traversed. Functional cis-acting elements are disclosed in the specification on page 4, lines 22 through 24. Further, cis elements responsible for seed-preferred were well known in the art at the time of filing as cited in Ezcurra *et al* and submitted in the response of August 8, 2003.

The test for sufficiency of support in a parent application is whether the disclosure of the application relied upon "*reasonably* conveys to the artisan that the inventor had possession at that time of the later claimed subject matter." (MPEP 2163.02).

By disclosing the foregoing identifying characteristics, it is believed that one of skill in the art would reasonably conclude that the applicant was in possession of the claimed invention. Accordingly, this rejection should be withdrawn.

Scope of Enablement

Claims 1, 2, 6, 21, 40, and 44-45 are rejected under 35 U.S.C. §112, first paragraph because the specification does not reasonably provide enablement for claims broadly drawn to a fragment of the nucleotide sequence set forth in SEQ ID NO:1.

The Office Action states: "Applicants... cite Ezcurra *et al* as a reference for nucleic acid elements (cis-acting elements) conferring seed-specific expression in stable transformants ... the Office contends that the teachings of Ezcurra *et al* needed to be incorporated into the specification at the time of filing."

The rejection is respectfully traversed. The law is clear that patent documents need not include subject matter that is known in the field of the invention and is in the prior art, for patents are written for persons experienced in the field of

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the invention. See *Vivid Technologies, Inc. v. American Science and Engineering, Inc.*, 200 F.3d 795, 804, 53 USPQ2d 1289, 1295 (Fed Cir. 1999).

The Office is asked to cite the basis for the assertion that the Ezcurra *et al* reference is required to be incorporated into the specification at the time of filing.

The Office Action further contends: "...that Applicants needed to exemplify at least one fragment of SEQ ID NO:1 that gave seed-preferred expression ... Given the lack of teaching and examples of fragments that provide for seed-preferred expression, or for nucleic acid sequences operably associated with a DNA coding for a maize Jip1 protein, undue experimentation would be required by one skilled in the art, to make and/or use the claimed invention."

The MPEP states: "Compliance with the enablement requirement of 35 USC 112, first paragraph, does not turn on whether or not an example is disclosed". (MPEP 2164.02, first paragraph).

Supporting argument previously submitted in the amendment filed August 8, 2003 are maintained.

It is submitted that the specification is fully enabling of present claims 1, 2, 6, 21, 40, and 44-45 such that one of skill in the art could, without undue experimentation, isolate one or more nucleic acid molecules that: "...drive transcription in a seed-preferred manner... comprising a fragment of SEQ ID NO:1".


In view of the amendments and remarks, it is submitted that the rejections under 35 USC §112, first paragraph, should be withdrawn.

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CONCLUSION

On the basis of the above remarks, reconsideration of the application and its allowance are respectfully requested.

Respectfully submitted,


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